# Engineer’s virtual siphon toilet challenges centuries-old water waste in bathrooms



In a world increasingly focused on disruptive tech breakthroughs and high-profile innovations, one engineer and author is turning attention to a surprisingly overlooked yet critical issue: the massive daily waste of potable water through traditional toilet systems. eShan, whose journey spans from humble beginnings in India to a systems analyst career in Singapore, is challenging the long-standing plumbing designs that have scarcely changed since the Victorian era, calling for a rethink of water usage inside our bathrooms.

eShan’s personal experience with water scarcity and waste began when he witnessed the vast quantities of drinkable water being flushed away twice daily in high-rise buildings during his time in Singapore starting in 1992. Reflecting on this, he shared with LA Weekly, “We treat water scarcity as a crisis while literally flushing potable water down the drain. It’s like using champagne to wash your car. Why flush so much water and create so much sewage water that requires additional energy and resources to process?” This stark observation became the foundation for his inventive approach.

Seeking a solution beyond conventional conservation tools like cistern bags, which he criticised as insufficient and often requiring multiple flushes, eShan targeted the archaic siphon mechanism integral to modern toilets. The siphon design, which traps water in the bowl to prevent sewer gases, dates back over a century and is the root cause of excessive water use during flushing. eShan developed an alternative—the Virtual Siphon Toilet—promising to achieve the necessary sanitary effects with just one-fifth of the water traditionally used, eliminating noisy flushes and high water consumption.

Despite the potential of his practical, water-saving design, eShan encountered considerable resistance. NGOs and green technology companies offered only polite interest but no substantial backing. “When I questioned why any water was needed at all, the response was lukewarm at best,” he said. His insight suggested that some stakeholders might prioritise the profitability of water scarcity issues over their resolution. Undeterred, eShan created a 3D printed prototype and applied for a patent, which remains pending.

Financially depleted and living with his parents in India, eShan turned to writing to spread his ideas. Embracing technology again, he utilised Sudowrite, an AI writing assistant, to craft a compelling speculative fiction narrative centred on his Virtual Siphon Toilet concept. He explained, “AI didn’t write my story. It helped me find a new way to tell it. When traditional doors closed, technology opened a window for ideas that deserved to be heard.” His latest Kindle release, *Global Citizens’ Manifesto: Virtual Siphon Toilet*, blends satire with scientific warning to highlight environmental indifference as the chief antagonist.

This publication follows his earlier work under the pen name EShan V, *Global Citizens’ Manifesto: Happy New Democracy*, which critiques existing political systems and advocates for AI-augmented direct democracy. Both works showcase his characteristic mix of dry wit and substantive critique.

With global water demand projected to outstrip supply by 40% by 2030, and Americans alone flushing an estimated 1.6 gallons—equivalent to four Starbucks Venti cups—per toilet use, eShan’s book provides a narrative framing to an urgent real-world problem. “‘The toilet hasn’t fundamentally changed in over a century,’” he mused. “‘We’ve put people on the Moon but still use potable water to transport waste. It’s perhaps the most overlooked environmental crime of our time.’”

Despite lacking institutional or government support, eShan’s campaign has gone directly to readers via Kindle, bypassing traditional publishing hurdles. Besides literature, he is inviting visionary creators worldwide to adapt his AI-enhanced narrative into films and translators to bring his series to additional languages, aiming to widen its reach. He also launched a crowdfunding effort to advance development of his Virtual Siphon Toilet prototype into a practical, affordable product.

eShan’s approach underscores the power of fiction to convey critical technological ideas in accessible forms. “Sometimes fiction can accomplish what technical papers cannot,” he said, “People connect with stories in ways they don’t with specifications and diagrams. That’s why I wrote ‘Virtual Siphon Toilet’ as a narrative rather than just another patent application.”

As Los Angeles and many other urban centres face ongoing water supply challenges, innovations like eShan’s Virtual Siphon Toilet could offer vital relief by dramatically reducing water waste in domestic settings. While it may lack the glamour or flashiness of high-profile tech ventures, its simplicity, cost-effectiveness, and ecological benefits present a compelling case for re-examining society’s unseen bathroom habits.

For readers interested in supporting or contacting eShan about his work, he is reachable via email at newfatherofsg@gmail.com. His story and invention invite further discussion on how small but crucial changes in everyday infrastructure might contribute to addressing global environmental challenges.

Source: [Noah Wire Services](https://www.noahwire.com)

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